UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,874	08/27/2001	Jeff S. Eder	AR-21	3540
53787 ASSET TRUST	7590 09/16/200 Г. INC.	EXAMINER		
2020 MALTBY		POINVIL, FRANTZY		
SUITE 7362 BOTHELL, WA	A 98021	ART UNIT	PAPER NUMBER	
			3692	
			MAIL DATE	DELIVERY MODE
			09/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Applicat	ion No.	Applicant(s)					
		09/938,8	374	EDER, JEFF S.					
	Office Action Summary	Examine	er	Art Unit					
		Frantzy F	Poinvil	3692					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1) 又	Responsive to communication(s) filed	d on 14 June 2008							
2a)□	Responsive to communication(s) filed on <u>14 June 2008</u> . This action is FINAL . 2b) This action is non-final.								
′—		<i>,</i> —		ers, prosecution as to the	e merits is				
٥,١	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims	·							
	Claim(s) 79-118 is/are pending in the	application							
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	5) Claim(s) is/are allowed.								
	6)⊠ Claim(s) <u>79-118</u> is/are rejected.								
	Claim(s) is/are objected to.								
· ·	Claim(s) are subject to restrict	ion and/or election	requirement.						
,	on Papers		•						
		_							
•	The specification is objected to by the			but the Eversiner					
10)	The drawing(s) filed on is/are:		-	•					
	Applicant may not request that any object		-	• •	-D 4 4047 IV				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>See Continuation Sheet</u> .	ГО-948)	Paper No(s	summary (PTO-413) s)/Mail Date nformal Patent Application 					

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :7/23/2008; 1/25/2008; 11/20/2007; 2/17/2006; 12/30/2005; 10/16/2005; 09/16/2005 and 2/03/05.

Application/Control Number: 09/938,874 Page 2

Art Unit: 3692

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 79-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 79, line 6, it is unclear of which data is being prepared? Is it the aggregated data or the transaction data?

On line 7, "element" should read - -elements- - for consistency purposes.

On line 11, "the" before "raw" should be deleted. Also on line 11, "each" should be deleted, and --said -- should be inserted before "neural". On line 15, "each" should be deleted and replaced by --said --.

On lines 4 and 16, what are aspects of financial performance? How is that minimized?

As per claims 82 and 95, it is unclear of what "W", "R", "k" and "Y" stand for.

As per claim 85, and 98, 104, 111, line 4, what are the "others"? On line 5, what is a chromosome exchange?

As per claim 91, line 5, what is a chromosome exchange?

As per claim 92, line 2, "executable" should be changed to --when executed -- On line 8, "element" should be changed to --elements--. On line 12, "the" before "raw"

should be deleted, and --said -- should be inserted before "transformed". On line 34, "models" should read --model--. On lines 5 and 17, what are aspects of financial performance? How is an aspect of financial performance being minimized? On line 30, "models" should be changed to --model--.

As per claims 88 and 101 and 114, it is unclear of how the claimed system is employed to interact with the claimed "financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, and combinations thereof".

As per claim 105, lines 6-7 and lines 9-10, what are "aspects of financial performance"?

Claims not directly addressed are rejected based on their dependency.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 79-88, 91-101, 104-114, 117-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, Daniel, "How to sort out the premium drivers of post-

Art Unit: 3692

deal value", Mergers and Acquisitions, Philadelphia: Jul/Aug 1993, Vol. 28, Issue 1, pg. 33, 5 pgs in view of Brown et al., " Neural Networks Enter the World of Management Accounting", Management Accounting, May 1995, 75, 11; ABI/INFORM Global, page 51.

As per claims 79, 80, 81, 83, 84, 85, 86, 87, 88, 91, 92, 93, 94, 96, 97, 98, 99, 100, 101, 104, 105, 106, 107, 109, 110, 111, 112, 113, 114, 117 and 118, Bielinski teaches a computational framework system for analyzing a firm or company. Bielinski describes that many types of value elements or drivers may be used which connect to one or more aspects of financial performance of the firm. Particularly, Bielinski states "However, relatively few buyers take advantage of the capabilities of these models to enhance their due diligence and formulate strategies for increasing the cash flow (revenue, expense & capital change) and enhancing the value of their acquired targets. Even fewer sellers use these models to help maximize the cash flows and values of their companies before putting their firms up for sale" (see page 1). Bielinski further states "For example, a 5% annual increase in sales, while holding relative cost relationships constant would have dramatically expanded cash flow by 84%....". See page 2 of the article. Thus, Bielinski teaches the one or more aspects of financial performance are selected from the group consisting of revenue, expense, capital change, market value. Bielinski further states the elements of values or drivers may be growth, profit margins, materials, human resources, technological/capital and other cost of goods sold. Particularly, Bielinski states "A discounted cash flow business valuation is performed, a projection of future cash flow (including a residual) is developed and discounted at an appropriate rate, usually the cost of capital to arrive at an indicated value. Second, key factors (or value drivers), such as growth, profit margins, etc.

Art Unit: 3692

are varied systematically to test the sensitivity of the indicated business value to each driver" See page 2 of the article. Thus, Bielinski clearly teaches the one or more elements of value are selected from the group consisting of brands, customers, employees, partnerships, vendors, vendor relationships and combinations thereof.

Bielinski is noted to broadly use a plurality of different types of computerized models to determine or analyze the firm but does not explicitly state the models include neural network having a plurality of hidden nodes and a plurality of relationships between the nodes. In a similar environment, Brown et al teach in analyzing a firm, many types of computerized models may be used. The computerized models include rules (inference procedures) systems, cases (case-based reasoning) systems and pattern matching (neural networks) systems. See page 51 of the article. Newly inputted data may be inputted into the system to allow the system to be retrained so as to provide new solutions or analysis result of a firm. It should be noted that a neural network inherently includes a plurality of input and output nodes and intermediary or hidden nodes having a plurality of relationships there between. The number of input nodes or hidden nodes is left to the user for obtaining the number of iterations or best output or result. The nodes may have different weights or scores or values.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Brown et al into Bielinski in order to analyze a firm using various elements or value drivers in order to more accurately obtained a current and predicted value of the firm.

Types of neural networks include and not limited to genetic algorithms, nonlinear, regression models, back propagation models and time series models. It would have been obvious

Art Unit: 3692

to one of ordinary skill in the art at the time the invention was made to apply different desired types of neural networks in the combination of Brown and Bielinski with the motivation of obtaining a best desired possible predictive result.

As per claims 82, 95 and 108, when training a neural network, a time period and an error rate is usually set so as to ascertain a best result and when to stop the training process with a certain degree of confidence. Doing the same in the combination of Brown and Bielinski would have been obvious to one of ordinary skill in the art at the time the invention was made in order to obtain a trained neural network with a high degree of confidence.

3. Claims 89-90, 102-103 and 115-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinski, Daniel, "How to sort out the premium drivers of post-deal value", Mergers and Acquisitions, Philadelphia: Jul/Aug 1993, Vol. 28, Issue 1, pg. 33, 5 pgs and Brown et al., " Neural Networks Enter the World of Management Accounting", Management Accounting, May 1995, 75, 11; ABI/INFORM Global, page 51 as applied to claims 79, 92 and 105, and further in view of Lyons et al (US Patent No. 4,989,141).

As per claims 89-90, 102-103 and 115-116, the combination of Brown and Bielinski are discussed above. The combination however failed to discuss the features of claims 89-90, 102-103, and 115-116. Lyons et al disclose a system and method for organizing, managing and consolidating financial data for creating financial and corporate reports. Lyons et al consider

various time periods and preprogrammed functions consisting of average, rolling average, time delay, trend, average time delay, rolling average time delay, ratio, average ratio, rolling average ratio, slope, average slope, rolling average and combinations thereof. Applicant is directed to columns 7 line 1 to column 9 line 17, column 10 lines 1-15 and columns 4-6 of Lyons et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Lyons et al into the combination of Bielinski and Brown in order to provide data to train the neural network to obtain desired results.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantzy Poinvil whose telephone number is (571) 272-6797. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 09/938,874 Page 8

Art Unit: 3692

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frantzy Poinvil/ Primary Examiner Art Unit 3692

FP August 21, 2008